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WELFARE OF AMERICAN SEAMEN

A MEMORIAL

OF THE

SEAMEN OF THE UNITED STATES PRAYING FOR THE DISAPPROVAL BY THE SENATE OF THE INTERNATIONAL CONVENTION ON SAFETY OF LIFE AT SEA, SIGNED AT LONDON, JANUARY 20, 1914, AND FOR THE ENACTMENT BY CONGRESS OF S. 136

PRESENTED BY MR. LA FOLLETTE

MARCH 20, 1914.—Referred to the Committee on Foreign Relations and ordered to be printed

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UNITED STATES OF AMERICA
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MEMORIAL OF AMERICAN SEAMEN.

To the Senate and House of Representatives of the United States:

The Seamen of the United States of America, through their committee duly appointed at their national meeting held at Seattle, Wash., May 12, 1913, respectfully petition for the disapproval by the Senate of the International Convention on Safety of Life at Sea, signed at London, January 20, 1914, and for the enactment by Congress of S. 136, "An act to promote the welfare of American seamen in the merchant marine of the United States; to abolish arrest and imprisonment as a penalty for desertion, and to secure the abrogation of treaty provisions in relation thereto; and to promote safety at sea." In support of said petition your petitioners respectfully represent and state as follows:

INTERNATIONAL CONFERENCE.

The great sacrifice of life resulting from the loss of the British steamship *Titanic* aroused the public mind of the civilized world to a realization of the great and manifestly growing dangers of travel by sea. The citizens and subjects of several nations insisted upon such changes in the construction, equipment, and manning of passenger steamers as would have a tendency to prevent such disasters in the future. Apparently responding to this public demand an international conference, representing 13 nations, was called to meet in London, England. The labors of this conference having been completed and the results thereof made public by Great Britain, we respectfully represent that the convention proposed should not be ratified by the United States for reasons amongst which we submit the following:

The convention, and the regulations attached to and made part of same, deals with:

Chapter I. Safety of life at sea.
Chapter II. Ships to which this convention applies.
Chapter III. Safety of navigation.
Chapter IV. Construction.
Chapter V. Radiotelegraphy.
Chapter VI. Life-saving appliances and fire protection.
Chapter VII. Safety certificates.
Chapter VIII. General.

The safety certificate, to be issued under the provisions of the convention, certifies:

I. That the above-mentioned ship has been duly surveyed in accordance with the provisions of the international convention, refered to above.

II. That the survey showed that the ship complied with the requirements of the said convention as regards (1) the hull, watertight subdivisions, main and auxiliary boilers, and machinery; (2) the boats and life-saving appliances; (3) Radiotelegraph installation.

III. That in all other respects the ship complies with the requirements of the said convention, so far as those requirements apply thereto.

The certificate will show the number of lifeboats and the number of persons they can accommodate, the number of rafts and the number of persons they can accommodate, the number of life buoys, the number of life jackets, and the class and number of wireless operators. It may also show, upon the owner's request, that the vessel in her construction, from the point of view of safety, is above the standard adopted by the convention. The standard applies to "new ships" which, for purposes of construction, means vessels whose keels are laid after July 1, 1915. All other vessels are "existing ships," and they may continue without alteration. This need not be shown on the certificate.

Article 57 of the convention, dealing with safety certificates, reads as follows:

A certificate, called a "safety certificate," shall be issued, after inspection and survey, to every ship which complies in an efficient manner with the requirements of the convention.

The inspection and survey of ships, so far as regards the enforcement of the provisions of this convention and the annexed regulations, shall be carried out by officers of the State to which the ship belongs; provided always, that the Government of each State may intrust the inspection and survey of ships of its own country either to surveyors nominated by it for this purpose or to organizations recognized by it. In every case the Government concerned fully guarantees the completeness and efficiency of the inspection and survey.

The safety certificate shall be issued either by the officer of the State to which the ships belong, or by any other person duly authorized by that State. In either case the State to which the ship belongs assumes the full responsibility for the certificate.

Article 60 reads as follows:

The safety certificate issued under the authority of a contracting State shall be accepted by the Governments of the other contracting States for all purposes covered by this convention. It shall be regarded by the Governments of the other contracting States as having the same force as the certificates issued by them to their own ships.

Article 61 reads as follows:

Every ship holding a safety certificate issued by the officers of the contracting State to which it belongs, or by persons duly authorized by that State, is subject in the ports of the other contracting States to control by officers duly authorized by their Governments in so far as this control is directed toward verifying that there is on board a valid safety certificate, and, if necessary, that the conditions of the vessel's seaworthiness correspond substantially with the particulars of that certificate; that is to say, so that the ship can proceed to sea without danger to the passengers and the crew.

It appears to your petitioners that by the adoption of these articles the United States will surrender its power to regulate foreign vessels coming to its ports. We believe that as a result of such action foreign ships will continue to have the advantages over American ships which, in the past, have been one of the main factors in destroying the American mercantile marine in the foreign trade.

Article 68 of the convention reads as follows:

The treaties, conventions, and arrangements concluded prior to this convention shall continue to have full and complete effect as regards (1) ships excepted from the convention; (2) ships to which it applies, in respect of subjects for which the convention has not expressly provided.

It is understood that, the subject of this convention being safety of life at sea, questions relating to the well-being and health of passengers, and in particular of immigrants, as well as other matters relative to their transport, continues subject to the legislation of the different States.

Your petitioners respectfully raise the question whether the expression "the different States" does not mean the different States

to which the ships belong and whether the passenger act will not, by virtue of this article, cease to apply to foreign vessels bringing passengers to ports of the United States. Further, whether existing treaties, conventions, and arrangements relating to crews of vessels are not, by the language used, made part of this convention and, therefore, must continue in force without abrogation or amendment until after July 1, 1921, under article 69, which reads as follows:

This convention shall come into force on the 1st of July, 1915, and shall remain in force without any prescribed limit of time. Nevertheless, each high contracting party may denounce the convention at any time after an interval of five years from the date on which the convention comes into force in that State.

This denunciation shall be notified through the diplomatic channel to the Government of Great Britain and by the latter to the Governments of the other contracting parties. It shall take effect 12 months after the day on which the notification is received by the Government of Great Britain.

A denunciation shall only affect the State which makes it, the convention remaining fully and completely operative as regards all the other States which have ratified it, or which have acceded thereto or which thereafter acceded thereto.

Your petitioners respectfully suggest that the Conference on Safety of Life at Sea has built and submitted to each of the high contracting parties a barrier against any legislation dealing with the subject of safety of life at sea inconsistent with the provisions of the convention; that this barrier, if ratified, will remain intact until after July 1, 1921; and that no improvements can be adopted by any State to be made applicable to other than its own vessels. Any higher and more expensive standards enacted and made applicable to domestic ships would put such vessels at a disadvantage in competition with vessels of other nations, and therefore, in event of the convention being adopted, no nation would be likely to take such action.

Among the standards of safety set by this convention and protected by this barrier are several which reduce existing standards. Thus, the present English law provides lifeboats for all persons on board, while Article XLII of the regulations annexed to the convention provides lifeboats for only 75 per cent of all persons on board, the remainder may be provided for with rafts.

Our present law dealing with radiotelegraphy provides that steamers plying between ports or places more than 200 miles apart and having on board 50 or more persons shall have wireless installation, continuous service with two certified operators. Articles 32, 33, and 34 of the convention reduces this requirement to such an extent that only fast vessels in the intercontinental trade are compelled to have wireless operators keeping continuous watch.

One of the standards set by the courts of the United States (in re Pacific Mail Steamship Co.) is that a crew is inefficient for service, either on the vessel or in lifeboats, if the men can not understand the orders of the officers. Article XLVII of the regulation annexed to the convention provides that the certificated lifeboat men shall be "capable of understanding and answering the orders relative to lifeboat service." This language permits the use of a crew that requires interpreters.

The same article prescribes a minimum number of lifeboat men for each lifeboat according to its carrying capacity. These lifeboat men, whose number is entirely too small to manage the boat except by help of others, may be drawn from the saloon, the deck, or the engine department. This is at variance with the action of the House of

Representatives in the Sixty-second Congress, and the action of the Senate in the present Congress, in both cases of which it was provided that each lifeboat must have at least two men of the rating of able seamen or higher as a part of its crew.

Articles XXXII and XXXIII of the regulations annexed to the convention provide definite specifications for the building of certain types of lifeboats and pontoon rafts, but Article XLVI of the regulations provides that lifeboats and rafts below that accepted standard may be continued on "existing ships" until January 1, 1920.

Article 42 of the convention provides that:

> Each boat must be of sufficient strength to enable it to be safely lowered into the water when loaded with its full complement of persons and equipment.

Article 49 of the convention provides that:

> The davits shall be of such strength that the boats can be lowered with their full complement of persons and equipment, the ship being assumed to have a list of 15°.
>
> The davits must be fitted with a gear of sufficient power to insure that the boat can be turned out against the maximum list under which the lowering of the boats is possible on the vessel in question.

Subsection (d) of Article XLVI of the regulation annexed to the convention provides that:

> The provisions of articles 42 and 49 of the convention, respecting the launching of boats, shall not be applicable to existing ships.

Your petitioners respectfully represent that the standards adopted by the conference are not sufficiently high to insure reasonable safety at sea, even on "new ships," and that on "existing ships," by exceptions provided for, some of the most unsafe of existing practices are legalized.

S. 136.

In support of S. 136 we respectfully submit the following analysis of the necessity for its enactment:

Senate 136 is substantially a copy of H. R. 23673, which passed the House in the last Congress, except that it has a new clause requiring sufficient lifeboats for passenger vessels.

In the report of the Committee on the Merchant Marine and Fisheries, May 2, 1912 (after exhaustive hearings, in which all objections now urged by shipowners were given consideration), it is described as follows:

> First. It will give freedom to the sailors. Second. It will promote safety at sea. Third. It will equalize the operating expenses of foreign and domestic vessels engaged in our oversea trade and tend to build up our merchant marine.

EQUALIZING THE COST OF OPERATION.

The shipowners have claimed that competition with foreign vessels was impossible because of the difference in cost of building and operating. They emphasize the difference in cost of operation. The last Congress equalized the building cost by admitting foreign-built vessels to American register for purposes of foreign trade.

All difference in operating cost is now in wages paid. The wage cost of operation depends upon the port in which the crew is hired, not upon the flag of the vessel. It is the same to vessels of all nations hiring their crews in the same port and engaged in the same or similar trade.

If foreign ships were deprived of certain special privileges, under which they now have the aid of our Government in forcibly retaining or recapturing the men secured in ports with a lower wage rate, such foreign ships would find it necessary to adopt the American standard of wages when trading to our ports. This in order to keep their crews or to obtain new crews. Let the United States cease to be a slave catcher for foreign ships. The certain effect will be to equalize the wage cost of operation.

"American" shipowners having money invested in foreign ships, with their partners the European shipowners, understand this to be the inevitable result of Senate 136. It will give real American ships proper opportunities in the foreign trade. That is why they oppose it.

The "special privileges" referred to above are the means by which, while in our ports, foreign ships are enabled to forcibly hold the crews secured at the lower wage rates of foreign ports. Under treaties and statutes our Government uses its police powers, at the request of foreign shipowners, to capture and return seamen who attempt to quit the service of their ships. Thus the wage rate of foreign ships is forcibly kept lower than that prevailing at American ports.

This marks the one advantage which foreign ships now hold over American ships in the foreign trade, and which prevents the proper growth of our merchant marine. Other conditions have been equalized.

The building cost was equalized by a clause in the Panama Canal act permitting American register to foreign-built ships for purposes of the foreign trade.

The cost of supplies is equal to all. An American ship trading between New York and Antwerp, for instance, purchases her supplies in Antwerp if the cost there is lower than in New York.

The remaining item, and the most important, is that of labor cost on the vessel itself, i. e., the wages of the crew. If conditions can be brought about whereby the wage cost of operation will be equalized, the development of our merchant marine and our sea power will be unhampered.

This is within the power of our Government. The present situation is entirely artificial. The remedy is to set free the economic laws governing wages, economic laws which, in their application to seamen, are now obstructed by treaties and statute law.

There has been a very common misapprehension that wages of seamen depend upon the flag under which they work. Their wages depend upon the port in which they are hired and sign shipping articles, regardless of the nationality of the vessel, and the wages in that port depends upon the standards of living in the country where the port is located. In other words, the economic law governing wages of seamen is exactly the same as that governing wages of any other class of workers.

Imagine two ships, one flying the American flag, the other a foreign flag, moored at the same dock in New York. The crew of the American vessel has been hired in New York at American wages; that of the foreign ship at some low-wage port in the Mediterranean. The two crews come into contact, each discovering the wages and conditions of the other.

What is the natural result? Unless prevented by force, the crew of the foreign vessel would either get the same wages as paid on the American vessel or they would quit. The foreigner would then have to hire a new crew at the wages of the port, not as the result of any organized action by the men, but as the result of individual desire inherent in human nature.

The foreign owner would have gained no advantage by his refusal to pay the higher wages to the crew he brought here. Under such conditions ordinary business sense would quickly induce him to pay his crew in accordance with American standards, in advance of arrival in an American port, as the only way to retain their services and thus avoid the cost involved in delaying his vessel for a new crew.

In 1884 Congress enacted a law intended to enable American shipowners to hire their crews in foreign ports where wages were lowest and to hold these crews in American ports where wages were higher. It was an attempt to force wages down to the foreign standard, but it failed to accomplish its purpose. The whole pressure of American life was against it.

The way to successfully equalize the wage cost of operation is to permit the men on all vessels in our ports to release themselves, instead of assisting shipowners to forcibly hold them. Equalization will then follow a natural course upward to the higher level in response to economic conditions. Equalization downward by artificial means is impossible, and results only in men quitting the sea.

Let Congress reassert and maintain domestic jurisdiction over all vessels in our ports, enact standards of safety and skill based upon American conceptions, equally applicable to all and kept under control of our own Government, thus depriving foreign vessels of any special privileges. The wage cost of operation will be equalized and so remain, and there will be no need of subsidies to rebuild the American merchant marine.

FREEDOM.

In our country seamen are the only persons who may be punished for violation of a civil contract to labor, by being arrested as deserters (except in the domestic trade), detained, and finally delivered back to the ship, or sentenced to a term in prison, for the simple act of quitting the service of an employer.

Modern education and this ancient status exist together. The native American, therefore, has left the sea to such an extent that few now remain, and the white man everywhere is leaving, because of the taint of slavery which extends, in its influences, even into the exempted portions of the calling.

Abolish the slave laws. Let American freedom extend to the decks of the American ship. Let American soil become free soil for seamen as it is for all other men. Then the United States will have the pick of the world's best seamen, while it is developing a much needed native personnel, a body of native American seamen owing allegiance to our flag and to none other. In short, enact Senate bill 136.

HOURS OF LABOR.

The hours of labor are discretionary with the owner and master. The seamen must work until exhausted or go to prison for "disobedience to lawful command."

Twelve hours work every day, seven days a week, at sea, is the minimum often exceeded. In port 15 to 18 hours a day, sometimes 30 to 40 hours at a stretch, are required. Then the vessel proceeds to sea and, without intervening rest, the men begin their sea watches.

Men who work thus are too much exhausted to attend to safety of ship and passengers. Yet in this condition they go to the lookout, to the wheel, and to other work upon which the safety of all depends.

Men on shore demand and often get the 8-hour day and the 6-day working week. Seamen ask simply watch-and-watch at sea (two on deck, three in fireroom) and a 9-hour work day in port, except in emergencies. Such regulations are provided for in Senate bill 136.

SAFETY.

Safety at sea, as everywhere else, depends either upon self-interest or upon law. The present insurance system and the laws limiting liability of shipowners to freight money pending and proceeds from sale of wreck has eliminated self-interest and legal responsibility on the part of the shipowners, except as noted below. Safety, therefore, can only be attained through laws compelling the necessary safeguards.

The courts in the case of In re Pacific Mail Steamship Co. denied the benefits of limited liability because of the proven incompetency of the crew. Such proof is very difficult to make and the question can not be raised until after the disaster. Shipowners avoid the whole point by organizing one corporation for each vessel, the wreck of which destroys the assets.

At present the shipowner may send his vessel to sea with a crew not one of whom, except the few licensed officers, has had any experience or can understand orders. There is now no limit to the number of passenger decks above the water line, nor to the number of passengers a vessel may carry in the domestic trade, except the conscience of the local inspector, pressed to the limit by the power and persuasion of the shipowners. Thus there is undermanning and lack of skill in the crew and, in many instances, dangerous overcrowding of passengers.

Senate 136 regulates this by requiring a percentage of able seamen on all vessels of over 100 tons, that there shall be two such men, or men of higher rating, for each lifeboat on passenger vessels, that 75 per cent of the crew in all departments must be able to understand orders of the ship's officers, and by basing the number of passengers upon the number and capacity of seaworthy lifeboats.

Opponents of S. 136 claim that some vessels can not carry a sufficient number of lifeboats on account of lack of space. That is true only in cases where steamers are now dangerously overcrowded. If lifeboats are necessary for a part of the passengers and crew, why not for all?

There should be no exemption of the coastwise trade, the Great Lakes, or of bays and sounds from the provisions of Senate bill 136. The Great Lakes, for instance, have within the past few months again proven among the most dangerous waters in the world.

Rivers and harbors are already exempted. The legal meaning of the word "harbor," according to Bouvier's Law Dictionary, is "a place where ships may ride with safety." It covers, therefore, sufficiently sheltered bays and other waters.

Proximity to land, except it be river banks or harbor docks, is not an element of safety. There is the added danger of a lee shore and of crowded navigation.

"Reaching land" means beaching the vessel and is only done in hopes of saving a few when otherwise all would perish. She may ground in from 12 to 20 feet of water a hundred fathoms to a mile distant from land, or the shore may be steep and rocky. But a collision or a fire may make "reaching land" impossible.

On excursion steamers the greatest danger is from fire. "Beach her; put on life preservers and jump overboard" is the "safety" offered by opponents of the bill. But how can help then be given without lifeboats?

Assuming that all the "women and children first" have jumped overboard, how long can they remain in the water without perishing? Of whose children were the shipowners thinking when they urged this as a means of safety, and what children were the inspectors considering when they accepted it?

No one will claim it is safe to crowd people into a theater or a shirt-waist factory and then to lock the doors.

Is it not even more dangerous to jam a steamer full of passengers and then to send it out of harbor without having on board the means whereby they may be taken off quickly and safely in case of need? Whether it be an ocean liner or an excursion steamer, the necessity is the same in that there should be lifeboats for all and skilled men to handle such boats. Other means are of little avail.

SKILL.

Inefficiency in the engine department, aside from its dangers, lessens speed, increases repair expense and consumption of fuel, and is therefore a constant appeal to self-interest.

Service in kitchen and saloon determines comfort; inefficiency there, being continuously apparent, results in loss of patronage and is guarded against accordingly.

The steadily growing inefficiency in the deck crew results in the increasing loss of life and property. Here the shipowner is secured by insurance and limitation of liability. Lloyd's underwriters faced $35,000,000 liability in the year just ended. Safety depends at all times upon the human element, at sea more than elsewhere.

The deck duty is so varied and crowded with emergencies that down through the times four years' experience on deck was required as training for the rating of able seamen. British and Norwegian commissions dealing with existing conditions recommended that a standard of three years' experience on deck be set by law. This now is the law in Great Britain, Germany, Australia, New Zealand, and is the standard set by Senate bill 136. Safety of the vessel, which

is the primary need, requires a sufficient number of these men to attend to their duties without overwork.

When a ship must be abandoned, the only safety is in lifeboats, the average crew of which is seven or more. At least two of the men in each lifeboat must have the highest skill and calmest judgment attained by seamen for the purpose of lowering the boat, getting away from the ship's side, attending to the sea anchor, using the steering oar, and guiding the work of the others. Such knowledge and training can not be obtained in the saloon or fireroom, or from any occasional "drill." Nor can men from the hot fireroom or sheltered saloon, scantily clothed, long endure the exposure in the bow or stern of a lifeboat.

The sailors' daily work in all kinds of vessels and weather, at the wheel, on the lookout, and on deck teaches them to know the sea and how to work with it. Their work with tackles, lines, and cables in hoisting and lowering trains their judgment of strains and distances. Up to their number they are now distributed among the lifeboats when all the boats are needed, and they are always the crew of the emergency boat for rescue work at sea

The claim that able seamen to qualify under Senate bill 136 are not available is not based on fact. The fact is that the average shipowner now refuses to employ a sufficient number of able seamen for reasonable safety at sea. But he eagerly accepts them into harbor gangs where, with the skill gained at sea, they prevent much damage in the shipping, hoisting, and lowering of expensive and heavy merchandise. Marine insurance covers freight only when it is in the vessel.

After the *Titanic* disaster, under pressure of public opinion and for purposes of advertisement, the number and capacity of lifeboats was increased in the North Atlantic trade in advance of legal requirements. In other trades no change came until the promulgation of new rules. But in no trade was the number of men increased, and the skill is lower than it was five years ago.

In every large city will be found many men who have left the sea in rebellion at the conditions imposed, and who have found that on shore the skill acquired at sea enables them to earn wages that permit of family life.

The real opposition to Senate bill 136 is not because of the increase in size of deck crew. In more than 90 per cent of the vessels no increase in the number will be required. But inexperienced men will be replaced by able seamen who, having greater skill, will require higher wages.

CAUCASIAN OR ORIENTAL, WHICH?

At present the controlling thought in navigation is cheapness. To get cheap men and to hold them the shipowners insist upon paying wages before it is earned, upon denying part payment in ports after it is earned, upon involuntary labor and imprisonment for desertion. Thus they retard the natural development of skilled seamen, and steadily force self-respecting men from the sea.

This must be reversed or shortly there will be no Caucasian seamen. "The prompt alleviation of the very unsafe, unjust, and burdensome conditions which now surround the employment of sailors and render

it extremely difficult to obtain the services of spirited and competent men, such as every ship needs if it is to be safely handled and brought to port," must be attained through law. Such law must be made applicable to all vessels sailing in and out of the ports of our country in order to equalize the wage cost of operation, or we shall never have a national merchant marine or seamen available for our Navy.

THE ABLE SEAMEN.

The following is a partial description of the routine duties performed by able seamen on steamships. We think it shows that the work and experience of sailors is not only such as to fit them for leading members of a lifeboat crew, but that they are so used now, and that in dividing the crews of vessels into lifeboat crews this is a fact recognized by masters and owners of vessels:

DEPARTMENTS OF THE SHIP.

Every steamer's crew is divided into three separate sections, known as the deck departments, the engine department, and the steward's department.

To obtain any conception of the character of work performed by able seamen on steamships and the skill required of them on such vessels it is necessary to know in a general way the work of the men in each department and to understand the relationship between the different departments and between each of the departments and the ship itself.

The deck department (sometimes called the captain's department) has to do with the general navigation of the ship. Its officers are in general command, the highest deck officer, i. e., the master, being in supreme command of the entire ship, every department being subject to his orders; the first mate taking command in the absence of the master and the second mate in the absence of his two superiors. The crew of the deck department, in which the able seaman is the unit, consists of the officers, quartermasters—where special men for steering are designated—boatswains, carpenters, a varying number of sailors officially designated either as "able seamen," "sailors," or "deck hands," and boys or men who are or who are supposed to be learning seamanship. A deck crew inefficient in skill or insufficient in number endangers the vessel, her passengers, and cargo.

The engine department (usually called the engineer's department) operates the boilers and engines, keeps them clean and in working order, making such repairs as can be done on the vessel. A chief engineer is in charge, with assistant engineers and a crew of oilers. water tenders, wipers, electricians, firemen, and coal passers. Inefficiency means large bills for shopwork, waste of fuel, and decrease in speed.

The steward's department has to do with the preparing and serving of food, care of staterooms and interior of cabins, and general personal service to passengers. It is in charge of a purser and chief steward, with a crew of cooks, waiters, pantry and linen men, bell boys, stewardesses, and chambermaids. Inefficiency in this department means loss of passengers, arising from bad reputation.

GENERAL EXPLANATION.

The world's ocean carrying trade is done (a) in sailing vessels from 100 to 5,000 tons, but the general type of sailing vessel is from 500 to 3,000 tons. The rig of these vessels range from the fore and aft schooner without topmasts to the four or five masted full-rigged ship with or without studding sails; the number of sailors on these vessels is approximately 125,000. (b) In steamers ranging in tonnage from 100 to 40,000 tons, but the general type varies from 700 to 7,000 tons, with a rigging consisting of two pole masts with two or more booms on each to four or five masts with up to eight cargo booms on each mast, besides some sail with or without gaffs, with or without wireless equipment; they employ about 90,000 sailors. Some of these vessels, steam and sail, trade to ports where there are towboats, wharfs, and freight handlers, but the greater number go to ports where none or few of these facilities exist, and there the sailors, led by the deck officers, and the firemen, led by the engineers, do the repairing in their several departments, and where the sailors do all the discharging and loading of cargo, using lighters, ordinary boats, or surf boats.

The deck crew of a steamer may be from 9 to 72 or even more, both inclusive of officers, while the whole crew runs from 18 or less in the small freighter trading to shallow harbors to 972 in the *Olympic*, and still more in the *Imperator*.

ABLE SEAMAN.

The term "able seaman," as used on board any ship, steam as well as sail, means a man who has had sufficient experience in deck service to acquire the skill in seamanship needed to perform the duties, routine and emergency, required in that service. Boatswains, quartermasters, etc., are simply able seamen assigned to certain positions.

The amount of gear and equipment used in the deck department on different classes of steamships varies greatly, of course, but it is a difference in degree, not in kind. The less gear and equipment the vessel may have, whatever her trade, the greater the skill needed in emergencies which no vessel can avoid. The deck crew of a steamer well supplied with rope and wire, lines and cables, booms, blocks and tackles, canvas, lumber, tools, and boats does not find it nearly so difficult to successfully meet emergencies as is the case on board a poorly equipped vessel. At the same time men can not learn a seaman's duties as quickly on a poorly equipped vessel as he can on one that is well supplied with gear of various kinds.

In reading the following partial description of a seaman's work it should be borne in mind that a sailor works on all kinds of ships and does not confine himself, can not confine himself, to one kind of vessel in any one given trade. When out of employment he can not remain idle, waiting until he can ship on a particular kind of a steamer, rigged and equipped in a certain way; but he ships—hires out—on any kind of vessel he can get, and so, of necessity becomes familiar with all classes of vessels, and must know his work in any or all of them.

THE GENERAL ROUTINE DUTIES OF ABLE SEAMEN.

The routine duties of the deck crew are so varied and the skill and knowledge required of able seamen is of such a character as to be exceedingly difficult to describe. The following, however, will give some idea of the routine work on steamships, what the seaman (sailor) learns while engaged in it, and how it therefore fits him for the numerous emergencies he must meet.

While on board ship in port the sailors are occupied mainly with preparing the vessel for sea. Much of the general work described herein is partially done while in port if there is sufficient time. The steering gear must be carefully overhauled, the wheel chains below decks taken down and, together with the wire rope, examined for needed repairs or substitution and set up again.

If they do not take part in the handling of cargo they must, at least, take care of the gear used in that work, in moving the steamer from one part of the dock to another, running lines, changing berths at the same pier, breasting her into a dock or springing her out, using heavy mooring hawsers and cables, holding on or surging with turns of the hawser around timber heads or bitts, or by compressor on a deck winch, putting the heaviest possible strain on the line without losing control by parting it.

A good deal of the painting of hulls is done in port. This is done from light staging—a narrow plank with or without crosspieces—constructed by the sailors and slung over the side by means of light but strong ropes, with use of hitches which will not jam but which are safe. Sliding down the rope to the narrow plank, which may be swinging more or less, especially when working over the bow or under the overhanging of the stern, they work anywhere from close to the water to 50 or 60 feet above it, climbing back on deck, shifting the stage after every fleet, making fast to the rail here, a cleat there, a stanchion or any other safe and convenient holding place. An imperfect hitch or knot here means man overboard.

While some of the crew is doing this, others are preparing gear and equipment, looking after the mooring lines, slacking off when too tight, or heaving in when too slack, or if deck crew be small one job is interrupted while more urgent ones are done.

The cargo out, loading is begun. Gear may have to be shifted, the hold cleaned out, or the vessel may proceed to sea light or in ballast, taken on board by longshoremen or sailors, hoisted or otherwise, unless water ballast is used.

In many trades and ports, coastwise as well as foreign, the deck crews load and discharge cargoes. This consists in slinging it on the dock, hoisting it from the dock, and lowering it into the hold, or in trucking it over a gangplank through a side port into the hold, where it is stowed away so that it will not be damaged and the vessel will be in proper trim; even where stevedores are employed the mate is responsible for the proper stowing of the cargo, and he usually details some able seaman to assist him in seeing that the work is properly done. Or the vessel may be in open ports, of which there are many, and passengers and cargo may be landed in lighters, boats, or by use of special boats called surfboats, carried especially for that purpose. The cargo may be anything from small package stuff, handled in net slings, to a piano or an automobile, costly glass or

china ware. In weight it may be from a few pounds to 50 or more tons. It may be lumber to be hoisted on board in sling loads or shoved in by hand and stowed in the hold, or it may be bales of wool or cotton to be stowed, or grain, coal, or ore to be trimmed. In any case, the stowing must be properly done, or cargo will be damaged and vessels are likely to be lost.

Ready for sea, an able seaman goes to the wheel. Lines are cast off or anchor weighed, cargo ports, if any, closed either partially, as on a short trip in good weather, or made secure and water-tight for a longer voyage or in bad weather. On passenger vessels the "emergency boats" are cleared away and swung out ready for instant use. Some passenger vessels send one man to the lookout in the bow, or the "crow's nest" on the foremast, immediately upon leaving port; others not until sundown or foggy. Freight steamers never, unless foggy or during night. On passenger ships the officer of the watch (one of the mates) goes to the bridge and takes charge as soon as the master is ready to be relieved, which is usually as soon as the vessel is out of port. Another mate or, if none, then some able seaman, selected for the purpose, supervises and assists in the work of clearing up the ship, lowering or topping and securing cargo booms, etc. Any stays or other rigging needing to be set up are attended to, hatches are battened down, i. e., made water-tight, or put in condition to be made water-tight quickly; heavy "strong backs" (handled by hand or purchase) have been placed under the hatch covers, wood or steel covers put on, and the tarpaulins (heavy canvas, soaked with tar) fastened on. There may be anywhere from 3 to 36 hatches to be battened down.

On passenger vessels lower deck hatches may also be battened down, if there be men enough on board to attend to it. Usually there are not; it always ought to be done because of possible collision.

Lines are coiled away, blocks, tackles, and guys used in connection with the cargo booms are taken down, coiled up, and stored away; everything put into such shape as to permit all rope gear to dry thoroughly in preparations for overhauling and repair. Anchors are secured, fish tackle, if used, is unshipped and stored away, or canvas cover laced on to protect it from the weather. All hawse pipes, chocks, or other openings leading into inclosed parts of the vessel are plugged or covered to keep seas from washing in.

Watches are then set if the crew is divided into equal watches; few passenger vessels in the coastwise or lake trade do this, but it is generally done in the over-sea trade.

In the general ocean trade, exclusive of large passenger vessels, each member of the deck crew, officers excepted, take a two-hour "trick" at the wheel and lookout, working around deck during the rest of their watch.

Clean ship. Wash decks, the outside of all deck houses, etc., using hose and brooms, afterwards seeing that all gear is in order and especially that rope gear is hung up; awnings and canvas weather cloths, when necessary, put up or taken down; fastenings and lacings are rope exclusively; care of these ropes, awnings, and weather cloths and their repair involves the same kind of work as is done on sails.

One sailor sounds the pumps hourly or every watch, watching for leaks, sounds all ballast tanks to note the amount of water ship is making, so that she may be pumped out when necessary (there is

no such thing as a perfectly water-tight ship). The steering engine must be examined and oiled each watch, and when not actually in the engine room this is done by one of the deck crew; in fog or rain all exposed gear, signal halyards, tackles, etc., must be slacked off when shrinking too tight and likely to be damaged under the strain, and as they slack up when air becomes dry must be tightened again. Other work being done, the deck crew begins the overhauling of all cargo gear, working lines, cables, and hawsers for repairs. Stranded, chafed, or badly weakened parts are repaired by putting in a new strand, or the weakened part cut out entirely and the end put together again by a splice suitable for the line according to its use. New rope is uncoiled (a seemingly unimportant proceeding, but if improperly done the rope will be damaged and some parts of it rendered nearly useless), measured off in lengths needed, new tackles rove off, new lines prepared, spliced into blocks, new pennants, whips, and slings made. Awnings, tarpaulins, boat covers, weather cloths, canvas caps and covers for ventilators repaired or new ones made. On longer voyages and in properly manned vessels all these things are done on board by the deck crew. Extra lashings are prepared for various uses, rope swabs made, standing rigging oiled or tarred from time to time, and numerous things of the same nature attended to. In a greater or less degree this work goes on in all classes of ships.

The man who expects to be known as an able seaman on a steamship must know the use of rigging screws, fids, marlin spikes, serving mallets, the palm and needle, calking tools, and most of the carpenter tools, the mixing of paints and colors, how to obtain strong leverages with bars, ropes, tackles, how to brace with wedges and shores, besides knowing the various knots and splices, and to worm, parcel, serve, and seize, with rope and wire, and must be able to hold up his end of a job when it comes to climbing and working in places where both arm hold and foothold is difficult. He must know the lead line, not only its marks, but how to use it, to get correct sounding when the ship is in close quarters, the night dark, and the sea heavy, whether he stands in a smother of sea on a low freighter or far up the side of an immense liner. The compass, of course, is a familiar object to him, but he must know how to use it, how to steer the ship under all conditions, what to expect and how to meet it when he is steering across a current as well as with it or against it, through the swift rush of a narrows, passing at close quarters in and out of the suction of another heavy ship under speed, with the wind light or strong from any direction, heading into a heavy sea, taking it on either bow or quarter or abeam, under check or full speed, rolling and pitching heavily, or running before it, when a blunder may mean total loss of ship with lives and cargo. The man at the wheel must know his work, what to expect and how to meet it instantly, in calm or storm, daylight or dark, in clear weather or in fog. The man who learns to be a reasonably good helmsman in even three years is an exception, because, regardless of the aptitude of the individual, the personal knowledge of varying conditions, different ships and how they act under differing circumstances, familiarity with the various steering gears, can only be gained through experience necessarily covering a good deal of time. The steam steering gear, rendering less physical strength necessary and making possible the handling of larger ships, requires greater

skill than the old hand method which permitted the man at the wheel to feel the increasing or decreasing rudder pressure and thus warned him of just how the ship was acting.

Painting, scrubbing, etc.—Prepared paint is seldom brought on board ship. The raw material is put on board and is mixed according to needs by the able seaman. Graining, filling, varnishing, and lettering is done as well as ordinary flat painting. Sailors become sufficiently skilled at this work to qualify as journeymen painters on shore. The deck crew cleans all outside parts of the ship, except the funnel, from the masts and booms to the deck houses, decks, and sides of the ship. Some of this work must be described to show that there is more practice in it than simply scrubbing and painting.

Scrubbing and painting lifeboats (Usually painted white.) Covers removed and all gear taken from the boats—inside cleaned—boat lashings let go, boats hoisted clear of the chocks—outside cleaned—boats lowered in place, gear and lashings replaced. When painting, the same process is repeated.

Scrubbing and painting of masts. Gantlines must be rove either through sheaves just below the eyes of the backstays (near extreme top) or through block carried aloft for that purpose. The sailor goes up the ratlines to the eyes of the lower rigging, from there he "shins" up the topmast to the eyes of the upper rigging, where he hangs on as best he can while some one on deck bends the gantline onto the signal halyards and hoists it to the man aloft, who reeves the gantline through the sheave, unbends the halyards, slides down the mast to the eyes of the lower rigging, bringing the ends of the gantline and the signal halyards with him, thence to the deck. If no signal halyards, such halyards are usually rove off first to be used in hoisting up the gantline. If no ratlines on the lower rigging, he must "shin" all the way up the shrouds of the lower mast and then up the topmast. When the gantline is rove, it is bent onto a "boatswain's chair" (a short piece of board slung in a rope strap) and the sailor is hoisted back aloft. Reaching the highest point to which the "chair" can carry him, he is anywhere from 10 to 15 feet below the truck or extreme top of the mast. He gets out of the "boatswain's chair" and "shins" the bare pole to the very top, sometimes using a rope strap. Scrubbing materials are sent up to him on the signal halyards, and hanging onto the bare pole he works down in that manner until he gets low enough to swing himself into the "chair" again; after which he works down, lowering himself as needed by slacking away on the gantline, which he makes fast to the "boatswain's chair." Reaching the deck, he is hoisted aloft again and then goes through the same performance in painting, which may include gilding or painting the ball on top of the mast. Anywhere from one to three men work each mast. Where three men work, one takes the topmast, the other two the lower mast.

Ship's work of the nature described above continues unceasingly until bad weather sets in and heavy sea rises. Everything movable on deck must then be securely lashed, extra lashings are put on the more exposed lifeboats, some of the ventilator tops exposed to the wash of the sea are unshipped, canvas coverings lashed over openings, parts of hatches left open for ventilation are closed and battened down, and as needed life lines are stretched along exposed

sections of the deck. During the gale the watch on deck and sometimes the whole deck crew is constantly at work. Anything may break adrift, from a piano in the cabin in a passenger ship to a heavy cargo boom on deck, from paint pots in the forepeak to a spare anchor on the forecastle, from some cargo below decks or on deck to a lifeboat on the gallows; the deck crew must secure it whatever it is and put on the necessary lashings. A deadlight is smashed in, a hatch cover loosened, part of a rail broken, a ventilator cap torn off, a companion ladder getting shaky, a cargo port weakened and leaky; the able seamen must do whatever necessary to remedy the damage. No matter what kind of ship, no matter the trade, when the gale is on the deck crew finds no time for anything except to perform work immediately necessary for the safety of the ship and its equipment, aside from being prepared to meet the many grave emergencies that may arise. On such occasions they work often without any rest until so exhausted that they are absolutely unable to do any more.

The weather moderating, unusual lashings put on boats are removed, life lines taken down, parts of hatches reopened, ventilators reshipped, and in event any damage done it is repaired as far as is possible at sea. In all this, excepting only in connection with the engine and boiler rooms, and sometimes even there, the deck crew, working under supervision of the deck officers, are called upon.

Routine work is resumed and continued. When no other work is immediately necessary some interior chipping of rust, scraping, and painting may be done inside or outside the hull, the towing hawser or anchor chains are overhauled and restowed. Damaged rigging or damaged service on shrouds may have to be repaired, ratlines may have to be replaced, if of rope seized with marlin; if iron rods, with wire seizing; canvas covering used on some parts of the deck and on top of the deck houses may be ripped off and new stuff laid; life preservers overhauled and repaired; the ship's colors, signal flags, etc., kept in good condition. The work is never completed, because there are not men enough in the deck crew, and some of it is done in sail lofts and by "harbor seamen" when the vessel is in port.

Nearing port, preparations are made for landing of passengers and discharging of cargo. Necessary gear is made ready, anchors ready, hatches unbattened, etc. The vessel may go to a dock in convoy of tugs, as in the case of a big liner, or may work her way in alone close enough for one of the sailors to slide down a rope and swing himself onto the dock to take a line; or she may come to anchor in some harbor, a roadstead, or off the open beach, as the case may be. Passengers may be landed over gangplanks, cargo discharged by longshore gangs, or, if in bulk, scooped out by powerful machinery in ports where traffic is regular and heavy and the docks arranged for the purpose; or the cargo may be handled by the deck crew, as in some trades like that of the Pacific, some of the bay and sound steamers of the Atlantic, or the combination passenger and merchandise steamers of the Great Lakes; or, if in one of the hundreds of small or open ports of the world, passengers and cargo may have to be landed in boats manned by the deck crew, sometimes through heavy surf.

All vessels, steam or sail, carry lifeboats. One on a small sailing hooker, 2 to 4 on freight steamers, up to 30 or more on large passenger ships. The handling of boats in all cases, except at drills and when all boats must be used at the same time, is done almost exclusively by the deck crew.

The smaller class of vessels of all kinds lower a boat for general working purposes at every anchorage or port to communicate with shore, to run lines, etc., and man it by members of the deck crew. In all trades passenger steamers carry a working boat, handled by the deck crew, for general service in connection with ship's work.

The emergency boats, which are kept ready for instant lowering on passenger ships, are manned exclusively by members of the deck crew.

In rescue work at sea boats are manned entirely by able seamen if a sufficient number of such are on board. If able seamen are insufficient in number, the less experienced men in the deck crew fill out the boat crews, and when that is insufficient men from the other departments are necessarily used. The difference between the exhibition known as boat drill and actual service conditions and practice will be described later.

SOME EMERGENCIES.

Fire: In event of actual fire the official fire alarm used on passenger steamers in fire drill is promptly dispensed with. The bridge or pilot house and engine room is notified. Fire on deck or in the cargo is handled by the deck crew, getting help when needed from the engine department. When the fire is in the passenger quarters (the steward's department) the deck officer who responds with his crew of sailors takes immediate charge, his crew being assisted by the steward's men if necessary; when the fire is in the engine or boiler room or coal bunkers the deck officer with his crew promptly gets to the spot, but here the deck officer does not take charge as quickly, the engineer's staff usually being the best fire fighters for that part of the ship.

Stranding: When vessel runs ashore and the immediate assistance of tugs or other vessels is not to be obtained, the ship must be lightened and worked off in some manner. For this purpose cargo and other heavy material may be transferred from one part of the ship to another or may be thrown overboard. Among other things to be done may be the carrying out of an anchor to help pull the ship off. If the kedge anchor will not hold, one of the large anchors, regardless of size or weight, must be taken out and dropped some distance from the vessel with a heavy hawser attached. This is done by the deck crew; two or four lifeboats may be lashed together, a heavy boom or spar lashed across, the anchor suspended from the spar under the boats, the hawser lightered by other boats if necessary. The anchor is taken to the desired distance, the hawser thrown off the boats sustaining it and the anchor dropped by cutting the lashings holding it to the spar, whereupon the winches, capstans, or windlass may be used, putting the greatest possible strain upon the cable while the engines are backing or going ahead full speed. If another vessel appears to offer help, lines must be run between the vessels, and again the deck crew does the work, using the boats.

Wheel chains parting, or tiller quadrant breaking; relieving tackles are hooked on, the steering is done "pulley haul" while repairs are made; in bad weather (the only time it happens at sea) this is always a difficult and dangerous job, requiring skill in every man assisting.

Collisions: The damage must be ascertained, leaks stopped, and sinking prevented, or at least delayed, if possible. In this many things may be done, from dragging a sail or tarpaulin over outside of the injured spot to shoring down a lower deck opening over the damaged compartment to hold the pressure, shoring and bracing strained bulkheads, and of course clearing away boats ready to receive passengers, etc.

Loss of rudder: Sails to be set for the purpose of steadying the vessel (most steamers carry sails on board ready to be bent on), a sea anchor sometimes made in a hurry, used if necessary, while a jury rudder or some other contrivance for steering the vessel is rigged up.

Engines disabled: The deck crew with sail and sea anchor must find some way to steady the ship and keep her out of the trough of the sea while repairs are being made.

Wireless gear aloft carried away: It is the able seaman who goes aloft to repair the damage and the deck officer who directs the work.

BOAT DRILL VERSUS ACTUAL SERVICE.

Held weekly; first the signal for "fire drill" is given, calling the various members of the crew to their stations, lines of fire hose are pulled down, and perhaps some of the valves are opened. Immediately after this comes the signal for "boat drill," for which the crew is now awaiting. They go to the boats to which they are assigned. In the assignment to boat stations the deck crew is divided between the various boats in such a way that one man from that part of the ship's crew will be in each boat, as far as their number will permit. In many instances, especially in steamers in the coasting, Great Lakes, and bay and sound steamers, the deck crew goes to the boats in advance and prepares them for the drill by letting go lashings, clearing away tackles, etc. The entire crew then proceeds to "drill," covers are pulled off (not always), boats hoisted from the chocks and swung out ready for lowering. In some cases the boat's painter is passed out, and plugs put in place. The boats may or may not be lowered into the water. In event any of the boats are lowered the job consists of simply lowering the lifeboat into the smooth water of the harbor. Oars are gotten out and some pulling is done. Boats are then hoisted up and placed in the chocks, after which the deck crew completes the job of straightening out the gear, relashing the boats, etc.

A ship in distress is sighted, passengers and crew need to be transferred. Five or six of the lifeboats are ordered away for this work. Be the weather good or bad all boat-drill arrangement is dispensed with. The boats are cleared away and manned, not by their boat-drill crew but by members of the deck crews as far as the deck crew is sufficient in number to man such boats. In any event every important position in such boats is filled by able seamen or men of higher rating from the deck department, at the steering oar, the stroke oar, and the bow oar, are able seamen, and if the weather

be very bad no more boats are lowered than can be manned with a majority of able seamen in each boat and especially in all important positions. In a seaway with the ship rolling, a boat must be lowered so as to avoid too great a swing and gotten away from the ship's side as soon as it is water borne, otherwise it will be stove in by smashing against the ship's side, swamped, or capsized. The boats are lowered one at a time, bumpers or cushions of sails or matresses may be hung over the side, a bridle passed around the falls to check the outward swing, a line made fast to the lowest point that can be reached on the ship's side is passed into the boat where it is used to check the outward swing, while others of the crew guard against the heavy inward swing with their oars laid so as to catch the force of the blow without breaking the oars. A sea painter is used, leading from well forward on the ship and into the boat, where, unlike the ordinary painter, it is not made fast, but is held by one man with one or more turns around the thwarth to help keep her parellel with the vessel until it is time to let go, when it is used to shear the boat off from the vessel's side sufficiently to make possible the use of the oars. Perhaps the safety of the boat depends more upon this one man than upon any other that is in the boat until she is perfectly clear. The lowering of the boat must be done so at to keep her on even keel, and the two men lowering away at the tackles must work well together and understand their job, to which a knowledge of the sea is essential, or the boat may come down end on and spill the occupants out, or may be swamped even before the tackles are unhooked. One at a time the boats are thus sent away. As they return with their loads the people must be hauled on board, boats hoisted, and in this nothing is done as in boat drill.

A technical description might be attempted but would not be generally true, because things to be done, and sometimes even more important left undone, are as changeable as the ever-changing sea; nothing but the experience and skill coupled with the mental attitude acquired as the result of a seaman's daily work at sea can give to any person the qualities that go toward making rescue work at sea effective. On a steamer this can only be obtained in the deck department. The other departments require a high degree of skill, but it is of a different kind, acquired under different conditions and for different purposes.

To quote from Bullen's Men of the Merchant Service, page 256:

> An able seaman, properly so called, is a skilled mechanic with great ability. On sailing vessels his place in calm or storm never can be adequately filled by the unskilled, however numerous, nor in steamships in emergencies.

Perhaps the best description of the able seaman was by the master who said:

> Joe has been with me for two years. I have never seen him appear to be wet or cold nor to be stumped by any work that came his way on board the vessel.

He must indeed be able to do any work that comes to him or to which he is placed, or he will, at the discretion of the master, be reduced in rating and wages as provided in section 4612 of the Revised Statutes of the United States and by the maritime laws of all nations.

Up to the time when insurance had been so developed as to remove risks from the owner of a ship, and the responsibility to the traveler

and shipper had been minimized and practically wiped away by a limitation of shipowner's liability, the shipowner insisted that four years of experience was little enough time to fit a man to take care of his property at sea—and so he insisted when appealing to legislators or by attorneys pleading to a court—he talks differently now.

CONCLUSION.

The Caucasian is leaving the sea; the Oriental is filling the vacancy. Sea power is in the seamen; vessels are the seamen's working tools; tools become the property of nations or races who handle them.

Respectfully submitted.

INTERNATIONAL SEAMEN'S UNION OF AMERICA.
ANDREW FURUSETH,
V. A. OLANDER,
Legislative Committee.

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